BACKGROUNDER

TSUNAMIS

EMERGENCY INFORMATION

- Tsunamis are caused by an underwater disturbance usually an undersea earthquake. Landslides, volcanic eruptions, and even meteors can also generate a tsunami.
- Tsunamis can originate hundreds or even thousands of miles away from coastal areas. Local geography may intensify the effect of a tsunami. Areas at greatest risk are less than 50 feet above sea level and within one mile of the shoreline.
- 3. People who are near the seashore during a strong earthquake should listen to a radio for a tsunami warning and be ready to evacuate at once to higher ground.
- 4. Rapid changes in the water level are an indication of an approaching tsunami.
- 5. Tsunamis arrive as a series of successive "crests" (high water levels) and "troughs" (low water levels). These successive crests and troughs can occur anywhere from 5 to 90 minutes apart. They usually occur 10 to 45 minutes apart.

Hawaii, the highest risk area, averages one tsunami every year with a damaging occurrence every seven years. Alaska, also at high risk, averages a tsunami every 1.75 years and a damaging event every seven years. The West Coast experiences a damaging tsunami every 18 years on average.

WHAT IS A TSUNAMI?

A tsunami (pronounced "soonahm'ee") is a series of waves generated by an undersea disturbance such as an earthquake. From the area of the disturbance, the waves will travel outward in all directions, much like the ripples caused by throwing a rock into a pond. The time between wave crests may be from 5 to 90 minutes, and the wave speed in the open ocean will average 450 miles per hour. Tsunamis reaching heights of more than 100 feet have been recorded. As the waves approach the shallow coastal waters, they appear normal and the speed decreases. Then as the tsunami nears the coastline, it may grow to great height and smash into the shore, causing much destruction.

HELP YOUR COMMUNITY GET READY-

The media can raise awareness about tsunamis by important information to the community. Here are some suggestions:



- 1. Publish a special section in your local newspaper with emergency information on tsunamis. Localize the information by printing the phone numbers of local emergency services offices, the American Red Cross, and hospitals.
- 2. Periodically inform your community of local public warning systems.
- 3. Work with local emergency services and American Red Cross officials to prepare special reports for people with mobility impairments on what to do if an evacuation is ordered.
- Interview local officials and insurance companies about the proper types of insurance to cover a flood-related loss.
 Include information on the economic effects of disaster.





DID YOU KNOW...

- In 1964, an Alaskan earthquake generated a tsunami with waves between 10 and 20 feet high along parts of the California, Oregon, and Washington coasts. This tsunami caused more than \$84 million in damage in Alaska and a total of 123 fatalities.
- Although tsunamis are rare along the Atlantic coastline, a severe earthquake on November 18, 1929, in the Grand Banks of Newfoundland generated a tsunami that caused considerable damage and loss of life at Placentia Bay, Newfoundland.
- In 1946, a tsunami with waves of 20 to 32 feet crashed into Hilo, Hawaii, flooding the

- downtown area and killing 159 people.
- The Tsunami Warning Centers in Honolulu, Hawaii, and Palmer, Alaska, monitor disturbances that trigger tsunamis. When a tsunami is recorded, it is tracked and a tsunami warning is issued to the threatened area.
- Most deaths during a tsunami are a result of drowning.
 Associated risks include flooding, polluted water supplies, and damaged gas lines.
- Since 1945, more people have been killed as a result of tsunamis than as a direct result of an earthquake's groundshaking.

HOW THE PUBLIC CAN HELP AFTER A DISASTER

When disaster strikes, people everywhere want to help those in need. To ensure that this compassion and generosity are put to good use, the media can highlight these facts:

- Financial aid is an immediate need of disaster victims. Financial contributions should be made through a recognized voluntary organization to help ensure that contributions are put to their intended use.
- Before donating food or clothing, wait for instructions from local officials.

 Immediately after a disaster, relief workers usually don't have the time or facilities to set up distribution channels, and too often these items go to waste.
- Volunteers should go through a recognized voluntary agency such as the American Red Cross or the Salvation Army. They know what is needed and are prepared to deal with the need. Local emergency services officials also coordinate volunteer efforts for helping in disaster.
- Organizations and community groups wishing to donate items should first contact local officials, the American Red Cross, or the Salvation Army to find out what is needed and where to send it. Be prepared to deliver the items to one place, tell officials when you'll be there, and provide for transportation, a driver, and unloading.